# **Claim Amendments (Listing):**

1. (Original) A communication network for managing a user identifier of a user accessing data applications, the communication network comprising:

a wireless communication network for linking a mobile station with a data application associated with the wireless network, a user accessing the data application from the mobile station and being identified by mobile station identifiers;

a computer system in communication with the data applications of the wireless communication network, the computer system facilitating user sign on capabilities to the data applications from the mobile station by leveraging authentication already performed by the Home Location Register (HLR) corresponding to the mobile station identifiers.

- 2. (Original) The communication network according to claim 1, further comprising a communication network other than a wireless communication network for linking a user interface other than a mobile station with a data application associated with the other communication network, the user accessing the data application from the user interface being identified by the user identifier entered by the user.
- 3. (Original) The communication network according to claim 2, further comprising:

a server associated with the wireless communication network for hosting the data application; and

another server associated with the other communication network for hosting the other data application.

4. (Original) The communication network according to claim 3, further comprising:

a database in communication with the server associated with the wireless communication network; and

another database in communication with the server associated with the other communication network.

- 5. (Original) The communication network according to claim 4, wherein the computer system facilitates population of the user identifier for the user in the database and in the other database.
- 6. (Original) The communication network according to claim 2, wherein the computer system is configured to store the user identifier.
- 7. (Original) The communication network according to claim 6, wherein the computer system is configured to verify an identity of a received user identifier with the stored user identifier.
- 8. (Original) The communication network according to claim 7, wherein the computer system is configured to verify the identity of the user accessing at least one data application of a plurality of data applications and is configured to store the user identifier with other data applications of the plurality of data applications.

9. (Original) The communication network according to claim 2, wherein the computer system is configured for receiving any one of a new, changed, and updated user identifier from the data application associated with the other communication network, for populating the received user identifier with other data applications in the communication network.

10. (Original) The communication network according to claim 2, wherein the computer system is configured for receiving any one of a new, changed, and updated user identifier from the data application associated with the wireless communication network, for populating the received user identifier with other data applications in the communication network.

- 11. (Original) The communication network according to claim 1, wherein the computer system employs an Authentication, Authorization, and Accounting (AAA) program at least for authenticating an identity of, and authorizing access for, the user accessing the data application.
- 12. (Original) The communication network according to claim 2, wherein the computer system comprises:

a server employing an Authentication, Authorization, and Accounting (AAA) program for authenticating a user when accessing a data application from the mobile station through one or more elements of the wireless communication network; and

another server in communication with the AAA server for authenticating the user when accessing a data application from the other communication network and authorizing access thereto.

- 13. (Original) The communication network according to claim 2, wherein the computer system is in communication a with third-party network hosting a third-party data application.
- 14. (Original) The communication network according to claim 13, further .
  comprising an interface for interfacing the third-party network with the computer system.
- 15. (Original) The communication network according to claim 14, wherein the interface is a Lightweight Directory Access Protocol (LDAP) interface.
- 16. (Original) The communication network according to claim 14, further comprising an authorization server connected between the interface and the computer system.
- 17. (Original) The communication network according to claim 16, wherein the authorization server is configured for storing a user identifier received from the computer system.

- 18. (Original) The communication network according to claim 17, wherein the authorization server is configured to authenticate and authorize user access to the third party data application, a request for user access being received via the interface.
- 19. (Original) The communication network according to claim 17, wherein the authorization server is configured to authorize user access to a data application of any one of the third party, the wireless communication network, and the other communication network.
- 20. (Original) The communication network according to claim 14, wherein the computer system is configured to authenticate and authorize access to the third party data application and a data application of either the wireless or the other communication network.
- 21. (Original) The communication network according to claim 2, wherein the data application associated with the wireless network and the data application associated with the other communication network are through the same service provider.
- [[23]] 22. (Currently amended) The communication network according to claim 1, wherein the HLR authenticates a mobile station accessing the wireless network corresponding to mobile station identifiers.
- [[24]] 23. (Currently amended) The communication network according to claim [[23]] 22, wherein the computer system is configured to query the HLR for an authenticated mobile station accessing the wireless communication network.

[[25]] 24. (Currently amended) The communication network according to claim [[24]] 23, wherein the computer system queries the HLR for the authenticated mobile station in response to mobile station identifiers received from the data application the user is accessing.

[[26]] <u>25</u>. (Currently amended) The communication network according to claim [[25]] <u>24</u>, wherein the computer system is configured to verify the identity of the user accessing the data application based on the authenticated mobile station leveraged from the HLR corresponding to the mobile station identifiers received from the data application.

[[27]] <u>26</u>. (Currently amended) A method for managing authentication of a user accessing data applications of a service provider via at least two different networks, the method comprising the steps of:

receiving a user identifier entered by a user for accessing a data application associated with a wireless communication network;

receiving the user identifier entered by the user for accessing a data application associated with a communication network other than the wireless communication network

accessing a computer system from either the wireless communication network or the other communication network; and

verifying that the entered user identifier matches a stored user identifier in the computer system.

[[28]] <u>27</u>. (Currently amended) The method for managing an identity of a user according to claim [[27]] <u>26</u>, further comprising the steps of:

receiving a new, updated, or changed user identifier from the user; and

populating the new, updated, or changed user identifier with data applications accessible through the service provider for facilitating single sign on.

[[29]] 28. (Currently amended) The method for managing an identity of a user according to claim [[28]] 27, wherein the step of populating the new, updated, or changed user identifier further comprises the step of:

storing the new, updated, or new user identifier in the computer system accessible from .

the wireless communication network and the other communication network.

[[30]] <u>29</u>. (Currently amended) The method for managing an identity of a user according to claim [[28]] <u>27</u>, wherein the step of populating the new, updated, or changed user identifier further comprises the step of:

storing the new, updated, or changed user identifier on a database corresponding to each data application associated with the wireless communication network and each data application associated with the other communication network.

[[31]] 30. (Currently amended) The method for managing an identity of a user according to claim [[27]] 26, further comprising the steps of:

accessing a third party network through the service provider;

receiving the user identifier entered by the user for accessing a data application on the third party network; and

accessing a server or database in communication with the third party network via an interface.

- [[32]] 31. (Currently amended) The method for managing an identity of a user according to claim [[31]] 30, wherein the server or database is the computer system.
- [[33]] 32. (Currently amended) The method for managing an identity of a user according to claim [[31]] 30, wherein the server or database is in communication with the computer system.
- [[34]] 33. (Currently amended) The method for managing an identity of a user according to claim [[31]] 30, further comprising the steps of:

receiving a new, updated, or changed user identifier from a user using the data application on the third party network; and

storing the new, updated, or new user identifier in the server or database.

[[35]] 34. (Currently amended) The method for managing an identity of a user according to claim [[34]] 33, further comprising the step of storing the new, updated, or changed user identifier on a database corresponding to each data application hosted by the wireless communication network and each data application hosted by the other communication network

[[36]] <u>35</u>. (Currently amended) The method for managing an identity of a user according to claim [[35]] <u>34</u>, further comprising the step of storing the new, updated, or new user identifier in the computer system accessible from the wireless communication network and the other communication network.

[[37]] <u>36</u>. (Currently amended) The method for managing an identity of a user according to claim [[34]] <u>33</u>, further comprising the steps of:

receiving a new, updated, or changed user identifier from a user using the data application on the wireless communication network or the data application on the other communication network; and

storing the new, updated, or new user identifier in the server or database.

[[38]] <u>37</u>. (Currently amended) A method for managing authentication of a user accessing data applications on a wireless communication network, the method comprising the steps of:

receiving a mobile station identifier from a data application associated with a wireless communication network;

comparing the mobile station identifier with a mobile station identifier already authenticated by a Home Location Register; and

verifying that the mobile station corresponding to the mobile station identifier is authorized to access the data application.

[[39]] 38. (Currently amended) The method according to claim [[38]] 37, further comprising:

requesting and receiving authentication information corresponding to the mobile station identifier; and

determining whether the mobile station is authorized to access the data application based on received the mobile station identifier.

[[40]] 39. (Currently amended) A program product, comprising executable code transportable by at least one machine readable medium, wherein execution of the code by at least one programmable computer causes the at least one programmable computer to perform a sequence of steps, comprising:

comparing a user identifier received from a data application associated with a wireless communication network with a stored user identifier;

comparing the user identifier received a data application associated with a communication network other than the wireless communication network; and

verifying that the user identifier matches the stored user identifier.

[[41]] 40. (Currently amended) The program product according to claim [[40]] 39, further comprising the steps of:

populating a received new, updated, or changed user identifier with data applications accessible through a service provider for facilitating single sign on.

[[42]] 41. (Currently amended) The program product according to claim [[41]] 40, wherein the step of populating the new, updated, or changed user identifier further comprises the step of:

storing the new, updated, or new user identifier in a computer system accessible from the wireless communication network and the other communication network.

[[43]] 42. (Currently amended) The program product according to claim [[41]] 40, wherein the step of populating the new, updated, or changed user identifier further comprises the step of:

storing the new, updated, or changed user identifier on a database corresponding to each data application associated with the wireless communication network and each data application associated with the other communication network.

[[44]] 43. (Currently amended) The program product according to claim [[40]] 39, further comprising the steps of:

verifying that a user identifier received from a third party network matches the stored user identifier for access to a data application associated with the third party network.

[[45]] 44. (Currently amended) The program product according to claim [[44]] 43, further comprising the steps of:

storing a new, updated, or changed user identifier received from the third party network.

[[46]] 45. (Currently amended) A program product, comprising executable code transportable by at least one machine readable medium, wherein execution of the code by at least one programmable computer causes the at least one programmable computer to perform a sequence of steps, comprising:

comparing the mobile station identifier received from a data application associated with a wireless communication network with a mobile station identifier already authenticated by a Home Location Register; and

verifying that the mobile station corresponding to the mobile station identifier is authorized to access the data application.